



Refillable water bottles: Hydration stations

Mercer Island High School case study

Overview

Mercer Island High School (MIHS), a public high school with approximately 1,400 students, installed three hydration stations in 2013 to make it easier for students to refill their durable water bottles and to reduce use of single-use plastic bottles.

In the first month after installation of the hydration stations, students refilled 3,000 durable water bottles, thus reducing the number of single-use plastic bottles.

Plastic single-use water bottles

- More than seventeen million barrels of oil were used to produce the plastic water bottles used by Americans in 2006. — *Seattle Times*, February 28, 2008
- Americans throw away 2.5 million plastic bottles every hour. — *Clean Air Council*, cleanair.org

Benefits of refillable water bottles

- Using a refillable bottle saves money and conserves precious natural resources.
- Manufacturing the 31.2 billion liters of bottled water that Americans drank in 2006 required 900,000 tons of plastic, the equivalent of more than 17 million barrels of oil, and emitted more than 2.5 million tons of carbon dioxide. — *New American Dream*, newdream.org/c3/
- Bottled water costs about \$8 per gallon, but when sourced from Seattle's municipal water system – among the purest in the U.S. – it costs about one-third of one cent per gallon. — *Seattle Times*, February 28, 2008
- Decreased use of single-use plastic water bottles reduces the amount of recyclable materials generated by the school community. Depending on the school's contract with waste haulers and custodians, this decreased use of disposable water bottles may reduce recycling collection costs.



Installed station



Durable water bottles

Schools can encourage students to use refillable bottles instead of single-use disposable or recyclable bottles. For ideas on promoting durable water bottles, visit [Plastic Bottle Campaign - Secondary School - King County Solid Waste Division](#) which includes steps to recycling plastic bottles.

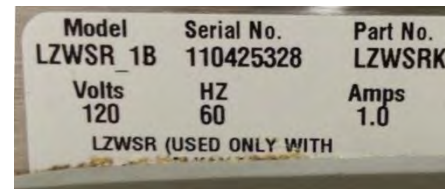


Equipment details

The school adapted its existing water fountains using Elkay EZH2O retro fit kits (part # LZWSRK). The Elkay catalog suggests this is a more cost-effective than installing a new unit. Station models include a water fountain, a water bottle refill spout, and an electronic count of water bottles filled at the station.

Vendor

MIHS purchased its equipment from [Ferguson Enterprises](#) in South Seattle (206) 767-7700



Station model and part numbers

Equipment cost and installation time

The school paid \$880.87 for each hydration station and purchased a package of three station water filters for \$231.86. If the cost of the bulk filter package is distributed among the stations it services, the total pre-tax initial equipment cost for each station would be \$958.16.

Installation took district staff between eight and ten hours per unit, varying based on the level of electrical wiring at each installation location.

Impact on bottled water revenue and alternative fundraising ideas

If a school currently receives revenue from selling bottled water, the school may need to find other revenue sources after installing refillable water bottle hydration stations. A few fundraising options are listed below.

- [Funding Factory](#): Schools ship used electronic equipment, including computers, printer cartridges, and cell phones, to Funding Factory for recycling. Schools are paid for each qualifying item shipped.
- Refillable water bottles (with or without custom printing of the school name and logo), could be sold to students for use at hydration stations.
- [USAgain](#): Schools receive a textile bin provided by USAgain, and place the bin in an accessible area outside the school. USAgain will write a check to a school based on the volume of clothes, shoes, and other textiles collected in the USAgain green and white bin.

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